United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Vale District Office
100 Oregon Street
Vale, Oregon 97918

IN REPLY REFER TO:

3809
OR 56953
OR-030-2-001

MAR 27 2002

Dear Interested Citizen:

Enclosed for your review and comment is Environmental Assessment (EA) OR-030-02-001 for a plan of operations submitted by Victor Industries, Inc. to mine and process zeolite in the Sheaville area, Malheur County. The EA analyzes the impacts of a 3.5 acre mining operation over the anticipated 10 year life of the project.

You have fifteen (15) days from the date of this letter to have postmarked for return any provided written comments on the EA. Public comments submitted for this review, including names and street addresses of respondents, will be available for public review at the Vale District Office during regular business hours (7:45 a.m. to 4:30 p.m., mountain standard time), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your comments. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

Please address your written comments to:

Tom Dabbs
Bureau of Land Management
100 Oregon Street
Vale, Oregon 97918

If you have any questions or need additional information, please contact Tom Dabbs or Cheryl Martinez at (541) 473-3144.

Sincerely,

Tom Dabbs

Tom Dabbs
Acting Field Manager
Malheur Resource Area

Enclosure (1)

ENVIRONMENTAL ASSESSMENT
FOR
VICTOR INDUSTRIES, INC. ZEOLITE MINE
OR-030-02-001

Prepared by: Rebecca Lange
U.S. Department of the Interior
Bureau of Land Management
Malheur Resource Area
100 Oregon Street
Vale, Oregon 97918

I. INTRODUCTION

A. BACKGROUND

In May 2001, Victor Industries, Inc. submitted a mining Plan of Operations (POO) under Title 43, Code of Federal Regulations (CFR), subpart 3809 to disturb up to 3.5 acres to mine a portion of the zeolite deposit on their 160-acre association placer claim, the Norton #1 (ORMC 155229). The mining claim is located within lots 1 and 2, S½NE¼, Section 1, Township 28 South, Range 46 East, Willamette Meridian, Oregon. The mining claim covers lands on both the east and west of U.S. Highway 95. The claim is located approximately seven miles south of the point where U.S. Highway 95 crosses the Idaho-Oregon border. This is approximately ten miles north of Jordan Valley in Malheur County, Oregon, and about 2 miles north of the historic Sheaville community site (see Map 1). The proposed disturbance is approximately in the center of the mining claim.

The Sheaville zeolite deposit has been known for a number of years and several attempts have been made to develop it since the mid-1960s, to date resulting in about about four acres of unreclaimed disturbance. Three acres of this is naturally revegetating, but the remaining one acre of disturbance has a rockier surface and has only sparse plant growth. The Norton Company, of Akron, Ohio, conducted exploration activities and removed minor amounts of ore from the site between 1983 and 1999, but never fully developed the deposit. Victor Industries, Inc. of Missoula, Montana, obtained an interest in the deposit in 2000 via the filing of a mining claim (Norton #1), and filed a Plan of Operations (OR-56953) with the Vale District Office to conduct bulk sampling and later, production, if the quality and marketability of the product is demonstrated; however, no activity has occurred to date. Under current 3809 regulations, a mining Plan of Operations is required for any actions which entail mining activities of locatable minerals.

B. PURPOSE AND NEED

This Environmental Assessment (EA) is prepared in compliance with the National Environmental Policy Act (NEPA) and the implementing regulations found in 43 CFR 3809.411(3)(iii). As the mine is located on unpatented mining claims on public lands administered by the Bureau of Land Management, the operations must comply with the provisions of the Surface Management Regulations (43 CFR 3809). In addition, as occupancy reasonably incidental to the development of a locatable mineral is intended, the operation must comply with the provisions of the Use and Occupancy Under the Mining Laws regulations(43 CFR 3715). These regulations recognize the statutory right of mining claim holders to develop federal mineral resources, as well as occupy the site(s) for mining-related purposes, and encourage such development consistent with the Mining and Mineral Policy Act

of 1970 and the Federal Land Policy and Management Act of 1976 (FLPMA). The regulations require BLM to review proposed operations, including occupancy, to ensure that:

1. Adequate provisions are included to prevent undue and unnecessary degradation of federal lands;

2. Reasonable measures are included to reclaim disturbed areas resulting from the proposed operation and occupancy;

3. Use and occupancy of the lands are reasonably incident to mining; and

4. The proposed operations and occupancy will comply with other applicable federal, state, and local laws, land use plans, and regulations.

C. CONFORMANCE WITH OTHER PLANS, AGREEMENTS, LAWS AND REGULATIONS

The proposed action is consistent with the following laws, regulations and plans:

The General Mining Law of 1872

This is the basic law governing the appropriation and purchase of federal mineral lands. It grants the right of an individual or company to use public lands for mining and associated activities (e.g., milling or waste disposal). This is a statutory right granted by the U.S. Congress.

The Mining and Mineral Policy Act of 1970

This law establishes the national policy of encouraging mineral development without undue hindrance.

The Federal Land Policy and Management Act of 1976

This law establishes the environmental protection requirements for the use, occupancy, and development of the public lands. Section 302 of the act directs the Secretary of the Interior to: (1) Manage the public lands under the principles of multiple use and sustained yield in accordance with approved land use plans, (2) To regulate the use, occupancy and development of the public lands, and (3) To prevent unnecessary and undue degradation of the public lands.

The 43 CFR 3715 Regulations

These regulations provide management controls over mining related use and occupancy of public lands, to ensure that those activities are reasonably related to mining.

The 43 CFR 3809 Regulations

These regulations provide surface management controls over mineral related activities, other than Wilderness Study Areas, to ensure that unnecessary or undue degradation of the public lands does not occur.

Northern Malheur Management Framework Plan. (1983)

This plan contains the decisions and overall plans for the use of public land in portions of Malheur County, Oregon. The proposed action conforms to the multiple use intent of the plan and specifically with objective M-1, which calls for the retention of all public land known or suspected to contain valuable mineral or energy deposits for exploration, discovery, detailed quantity and quality determination and eventual mining.

Oregon State-wide Planning Goals (1985)

This document outlines the planning goals of the Oregon Department of Land Conservation and Development. The proposed action generally conforms with those goals, and more specifically with Goal 9-Economy of the state.

Malheur County Comprehensive Land Use Plan

This plan contains the official goals and policies of Malheur County concerning land use planning, including a policy of encouraging development of natural resources (Goal 7, Policy 7.A.) where it will improve the economy of the county, consistent with state, federal and environmental laws.

II. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

A. PROPOSED ACTION

Mining Operations

Victor Industries proposes to extract zeolite from the area immediately east of and including about one acre of a previously disturbed deposit. The site is located approximately 2 miles north of Sheaville, in eastern Malheur County, Oregon. The operation would occur on the central portion of the 160 acre Norton #1 association placer mining claim (ORMC-155229), situated on the following described land:

Willamette Meridian, Oregon
T. 28 S., R. 46 E.,
Sec. 1, Lot 1, Lot 2, S½NE¼.
(See Map 2)

Victor Industries proposes to disturb up to 3.5 acres in four phases, beginning with initial mining, crushing, stockpiling, and hauling in the Phase I operating area. Operations would then proceed to the Phase II area, and so on to Phase IV. Concurrent reclamation would be conducted. Reclamation of the Phase I area would begin when mining begins in the Phase II area, and so on until final reclamation of the Phase IV area after mining stops. Mining activities would occur on a seasonal basis for a projected ten year period. The operating season would be from approximately mid-March to November or until weather conditions create wet, soft, and slippery driving conditions on the access road. Operations may last up to another ten years, if market conditions permit. Any disturbance outside the 3.5 acre four phase area would require a new Plan or a Plan amendment and additional environmental documentation to be completed.

The proposed mining area would be accessed by an original approximate 8-foot wide bladed earthen road from U.S. Highway 95. This dated access route, about 1000 feet long, leads east from the highway to the previously disturbed excavation site, near the center of the mining claim, atop a small knoll. The road would be cleared, graded and widened to approximately 13 feet total width and periodically maintained by a D8 or smaller crawler tractor (bulldozer) to insure employee safety and to facilitate proposed mining activities. Appropriate slope and drainage of the road would be provided. During extended periods of very dry surface conditions with vehicle operations, water would be applied to the access road for dust abatement.

Mining activities would begin in the area marked Phase I on Map 3, where prior mining had occurred, associated with the existing excavation site on the small knoll. Each phase of proposed mining is slightly less than one acre in size for a total of 3.5 acres of total disturbance. With concurrent reclamation, no more than 1 acre of disturbance is planned at a time. The zeolite would be extracted by the open pit mining method, using a 30,000-pound trackhoe. The trackhoe would have a one cubic yard bucket, with a maximum reach of 26 feet. The pit area may be blasted or stripped for extraction preparation by a front-end loader or by the bulldozer equipped with ripper blades. A pit would be worked in terraces to insure high-wall stability at a slope consistent with requirements of the Mine Safety and Health Administration and other state and federal requirements. The bulldozer would also be used to backfill the pit and maintain the access road. Up to 4 two-ton dump trucks would be utilized to haul to on- and off-site locations. Various support trucks would also be used. All equipment used for the project would be pressure-washed before being brought to the mine site, to alleviate the introduction of any foreign vegetation from the area. Any top

soil and overburden would be temporarily stored in separate windrows and used during reclamation actions.

On site facilities for employees would include a portable camp trailer which would be placed at the north end of the Phase I operations area in the area of the previously disturbed excavation site to provide for office operations, employee breaks, and housing for one or two employees to provide security and to prevent injury to the general public when seasonal mining activities are being conducted. The mine plan specifically excludes the need of any utility or access rights-of-way. A holding tank for waste water of the operations trailer and a portable toilet facility would be maintained and serviced as needed, with wastes periodically transported to an Oregon State approved sanitary waste facility.

Processing equipment for the mining operations would include an equipment parking area, a portable crusher, and a portable fuel tank in a lined fuel containment area (Figure 1). Additional equipment that may be added after operations are underway include: 2 vacuum silos, labeled 55 gallon drums for temporary storage of product for shipping, and an explosives magazine. All equipment and explosives supplies would be removed from the site during non-operation periods.

Mine Reclamation

Any disturbed area within the four phase proposal, pre-existing or not, would be reclaimed following mining operations. Reclamation work would be concurrent with mining; there would be only one excavation pit and one processing site at any on time. All disturbed areas would be reclaimed as soon as that area has been mined, or at the end of the annual mining season, with no more than one acre unreclaimed at any one time. Any topsoil removed from access road and excavation sites would be stockpiled in a windrows and either covered with plastic material or seeded to provide stability and protection against erosion and weed invasion. Stockpiled topsoils may be seeded with a mixture approved by the BLM. Each excavation site would be reclaimed to the highest extent possible with reshaping to blend with the adjacent contour where feasible and reasonably practical, stockpiled topsoil reapplied, and be seeded before a new excavation site is developed. Any unmarketable processed materials would be used for backfill prior to placement of topsoil and seeding. Earthen water bars on the access road would be installed at the end of each annual season.

Upon termination of all mining operations, any remaining disturbed area would be reclaimed with recontouring, appropriate placement of topsoil, and then seeded with a mixture approved by the BLM. All mine equipment and support facilities would be removed from public lands and, if to be discarded, disposed of at a State approved waste facility. The access road would be reclaimed or left in a defined condition following consultation with and approved by the BLM.

B. NO ACTION ALTERNATIVE

Under this alternative, mining operations would not be allowed to commence. The No Action Alternative is required by NEPA. Under the provisions of the General Mining Law of 1872, Victor Industries has the legal right to develop mineral deposits it has located on public lands. It is the BLM's responsibility to ensure that compliance with the applicable Federal and State Laws, such as the Endangered Species Act, the National Historic Preservation Act, The Oregon Mined Land Reclamation Act and both the 43 CFR 3715 (Use and Occupancy) and the 43 CFR 3809 (Surface Management) regulations are obtained.

It is also BLM's responsibility to insure implementation of reasonable reclamation and to ensure that mitigation measures necessary to prevent unnecessary and undue degradation of the federal lands are carried out. The BLM could prevent implementation of the project only if the proposed actions violated one or more of the applicable laws and regulations and must specify changes in the proposed Plan of Operations needed to meet the requirements of law.

III. AFFECTED ENVIRONMENT

Air Quality: The proposed mine is situated in a rural area with no concentrated industrial activity. Consequently, air quality is good, although it is occasionally impacted by dust and smoke.

Water Resources/Riparian: The proposed 3.5 acre mining disturbance is drained to the north and to the west by first-order channels that flow into intermittent channels which both cross under US Highway 95 through constructed culverts. These intermittent channels are tributary to perennial Succor Creek. The south end of the operations area drains west into an intermittent channel that is also dissected by Highway 95, and flows through a culvert to the west side of the highway.

Topography**:** The area of the proposed activity is located east US Highway 95, approximately two miles north of Sheaville, between Succor Creek and Cow Creek. The area is a series of moderately steep small hills at the edge of an upsloping ridge. A second ridge east of the proposed project, and Thomas Creek Ridge on the west, separate the proposed operations area from the north-south trending basin parallel to Succor Creek between Spring Mountain and the dissected ash flows of Coal Mine Basin. Succor Creek to the north is a perennial stream which flows north to the Snake River. Local relief is almost 2000 feet, ranging from a low of 4000 feet above sea level along US Highway 95 at the Malloy Ranch, to a high at the summit on Spring Mountain to the west of 5944 feet above sea level. Local relief immediately adjacent to the existing disturbed site at the location of the abandoned separator/bagger, is approximately 250 feet, ranging from a low of 4300 feet above sea level at US Highway 95 below the mine site to a high of 4554 feet above sea level on the ridge above the operations area.

Soils: Soils within the proposed mine range from shallow to deep, excessively to well drained, loamy sands to clay loams, and gravelly to no gravels over duripans or unweathered lacustrine sediments. Typically, these soils occur in recent alluvial bottomlands and older fans or terraces as well as steep and strongly dissected sediments (badlands).

The soils found in the proposed mine area were surveyed and described in Oregon's Long Range Requirements for Water 1969, Appendix I-11, Owyhee Drainage Basin. The project area consists of two soil mapping units from this fourth-order soil survey; 56-51/2-3 and 98-60/4-6. The two units incorporate four classification units that occur in various percentages within each unit and have two slope groups that range between 2-20 and 12 to 60+ percent.

Unit 56-51/2-3

Unit 56 soils with about 30 percent Unit 51 soils, 3-12 percent slopes. Most slopes are less than 7 percent.

Unit 98-60/4-6

Very steep, raw lacustrine sediments of Unit 98 with about 30 percent Unit 60 soils, 12-60+ percent slopes. Unit 60 soils occur on the less dissected areas interspersed throughout the badlands.

Classification Unit 56

Soils are shallow, well drained, with clayey subsoils and cemented pans. They occur on gently sloping to moderately steep old fans on high terrace remnants. Soils occur at elevations from 3,000 to 6,000 feet. Average annual precipitation is on the low side of the 8 to 11 inch range, and mean annual air temperature centers around 47 degrees F. The soil profile by depth consists of gravelly loam or silt loam with a gravelly clay loam on top of a cemented duripan that overlies stratified loamy sands and gravels.

Classification Unit 51

Soils are deep, somewhat excessively drained. This soil unit is made up of wind-sorted and reworked lake sediments and alluvium. Slopes are dominantly nearly level to gently sloping with undulating micro relief. These soils occur in areas of aeolian deposits on leeward sides of old dry lakes and stream bottoms. Soils occur at elevations from 3,000 to 4,800 feet. Average annual precipitation is on the low side of the 8 to 11 inch range, and mean annual air temperature centers around 47 degrees F. The soil profile by depth consists of loamy sand to loam over sandy loam.

Classification Unit 98

Unit 98 is a miscellaneous land unit consisting of highly eroded and dissected raw old lacustrine sediments occurring as badlands. Vegetative cover is very sparse.

Classification Unit 60

Soils are moderately fine textured, well drained on gently sloping to hilly uplands underlain by old lacustrine sediments of the Idaho, Payette and similar formations. Soils occur at elevations that range from 2,500 to 4,000 feet. Average annual precipitation is 8 to 10 inches, and mean annual air temperature centers around 47 degrees F. The soil profile by depth consists of loam and clay loam over clay loam and loam lacustrine sediments.

The proposed mine area is approximately an even mix of both map units described above with large amounts of raw lacustrine sediments evident. Additional soil inclusions can be found throughout the mine area that contain varying degrees of surface textures and roughness and are usually variants of these units.

Geology/Mineral Resources: The general area lies within the Lake Owyhee Volcanic field which extends from the Castle Rock caldera south to the Saddle Butte caldera and east to include Three Fingers Caldera and Mahogany Mountain Caldera. Eruptions from these volcanic cones resulted in immense calderas, such as the Mahogany Mountain caldera which is 10 miles in diameter. The Three Fingers Caldera to the northeast is a circular collapsed depression approximately 8 miles in diameter. As rhyolitic magma erupted from these pre-caldera volcanos, the subsequent ash, tuffs and continuing eruptions of lava produced the two calderas and the extensive Miocene ash-tuffs which cover much of southeastern Oregon and northern Nevada. Volcanic activity in the area dates to the Miocene, 15.5 million years. The oldest rocks in the Lake Owyhee Volcanic field are the colorful ash and lavas of the Sucker Creek Formation which were violently expelled from fissures on the plateau during the middle Miocene. Ash and thick layers of basalt were covered by additional accumulations of lava. The fine grained layers of tuff are usually thin and nearly white whereas the coarse-grained massive layers of fresh unweathered tuffs are greenish. Between episodes of intermittent volcanic eruptions, animals and plants flourished throughout the Miocene. Plant fossils found in the Sucker Creek Formation reflect a moist temperate climate of more than 20 inches of rain annually.

The area surrounding the proposed mining operation is underlain by tuffaceous sedimentary rocks overlain by basalt and interbedded with leaf bearing tuff, yellowish white or grey in color. Lenses of coal are present interbedded with deposits of Succor Creek Ash. The tuffs and sedimentary deposits date to between 15.5 and 10.6 million years ago. Bentonite and zeolites are produced from localities near Succor Creek from within the Miocene Sucker Creek Formation. The immediate mine area is a ridge, approximately 200 feet thick of zeolitic volcanic tuff.

Zeolites are a series of hydrated aluminosilicates, with an open framework crystalline structure, and an affinity for metallic ions. Due to their crystalline structure and the fact that they are negatively-charged, they have a wide variety of industrial uses, mainly as a molecular sieve in the area of environmental protection. Zeolites are used to remove heavy metals, radioactive elements and ammonia from industrial effluent and air streams. In addition, they are used as a food supplement in livestock, as they have the ability to absorb toxins in the feed and enhance food absorption by

these animals. Other uses include pet litter, horticultural applications, odor control, dessicants, gas absorbents, catalysts, oil absorbents and aquaculture. The type of zeolite found on the subject land is clinoptilolite.

Vegetation: Numerous vegetation types are found in the immediate project area. The previously disturbed areas of the proposed Phase I , II, and Phase III mining are in the process of naturally revegetating (see Map 4). Species recolonizing the disturbed areas include shrubs such as Basin and Wyoming big sagebrushes (*Artemisia tridentata* ssp. *tridentata* and *wyomingensis*), green rabbitbrush (*Chrysothamnus viscidiflorus*), gray rabbitbrush (*Chrysothamnus nauseosus*) and bitterbrush (*Purshia tridentata*); grasses, including Sandberg bluegrass (*Poa secunda*), cheatgrass (*Bromus tectorum*), and bottlebrush squirreltail (*Elymus elymoides*); and forbs such as Oregon sunshine (*Eriophyllum lanatum*), large-flowered collomia (*Collomia grandiflora*), and buckwheat (*Eriogonum* sp.). A plant community is found to the north and grading partly into the disturbed area which consists of Wyoming big sagebrush and bitterbrush with an understory of bluebunch wheatgrass *(Pseudorogneria spicatum*), Thurber's needlegrass (*Stipa thurburiana*), and sparse, scattered species such as stoneseed (*Lithospermum ruderale*), gray horsebrush (*Tetradymia canescens*), and serviceberry (*Ameliancer alnifolia*). In the less disturbed areas to the south there is a major concentration of monardella (*Monardella odorotissima*) with bitterbrush and scattered Douglas chaenactis (*Chaenactis douglasii*). This monardella community is also becoming reestablished on a portion of the disturbed area. Plant communities in the larger claim block consist mostly of Wyoming big sagebrush types with understories of bluebunch wheatgrass, Sandberg bluegrass, some Idaho fescue (*Festuca idahoensis*), and/or Thurber's needlegrass with a rich variety of forbs. There is an extensive bitterbrush component to many of these communities.

Two species listed by the state of Oregon as Endangered, Owyhee clover (*Trifolium owyheense*) and smooth blazing star (*Mentzelia mollis*), are found adjacent to the proposed area of mining operations. Owyhee clover sporadically occupies somewhat less than an acre in total in an area of approximately 5 acres along the eastern edge of the north-south ephemeral drainage in the eastern portion of the mining claim. This drainage is east of the currently disturbed ground. The sites supporting the clover are not continuous, but small pockets of clover are scattered from the NE¼NE¼ of Section 1 T. 28 S. R. 46 E. to a small site at the northern edge of the SE¼NE¼. Clover habitat consists generally of a Wyoming big sagebrush plant community on a rather non-descript, rocky, shallow ash substrate with a variety of associated forbs, including tapertip onion (*Allium acuminatum*) and Pursh's milkvetch (*Astragalus purshii*).

The smooth blazing star occupies a very small (25' X 50') site on a west-facing, brownish clay ash outcrop distinctive of the Succor Creek formation. Because of the lack of rainfall in the spring of the year when the site was discovered in 2001, very few plants were found. Other associates one would expect at this site, including bee plant (*Cleome* sp.) and yellow phacelia (*Phacelia lutea*),

were absent. This site occurs at the southern edge of the NE¼NE¼ of Section 1 in the township and range as above.

The areas identified to have Owyhee clover (*Trifolium owyheense*) and smooth blazing star (*Mentzelia mollis*) are shown on Map 5.

Wildlife: The key components of the plant community for wildlife are the antelope bitter brush, Wyoming sage, and bluebunch wheatgrass, exotic annuals, serviceberry, and forb species. The presence of permanent water in Succor Creek ½ mile to the east, and the proximity of Highway 95 ¼ mile to the west make the habitat value to various wildlife species somewhat unpredictable. Considerable deer sign was observed. The plant community found here normally would be considered important for a resident and migratory deer herd. However, the potential for highway mortality may make this area a population sink for deer (i.e. very attractive but the mortality rate probably exceed the natality rate). Other species observed were cottontail rabbit, rock wren and Brewers sparrows. Many other resident mammals and migratory bird species undoubtedly are present but were not observed, probably due to season observed, time of day and temperature.

Threatened/Endangered Species: No listed, proposed or candidate wildlife or fish species are present within the proposed mining area or are expected to be impacted by mining activities. Should additional species become protected by the Endangered Species Act during the life of the mining plan, activities that might be affected listed and proposed species would be subject to review.

Two special status animal species are present or likely present: loggerhead shrike (Bureau sensitive), and northern sage grouse (Bureau sensitive). Bureau policy is to manage lands in a manner to avoid the future listing of these species under the Endangered Species Act. The 2000 Greater Sage-Grouse and Sagebrush-Steppe Ecosystems Management Guidelines directs BLM offices avoid activities that adversely affect sage-grouse habitat and life history requirements. Research shows a high proportion of sage-grouse nests are located with 4 miles of the lek where suitable nesting habitat exists. Information from ODFW indicates seven sage-grouse leks are within 4 miles of the proposed mine. Also, the shrub community and herbaceous understory composition observed within the undisturbed areas 1/4 mile east, north, and south of the proposed operations area generally appear suitable for nesting and early brood rearing by sage grouse. However, the topography of the proposed mining operation is steeper than usually used by sage-grouse and the proximity to Highway 95 probably makes the proposed mine area unattractive to nesting grouse. Certainly the existing disturbed area at the mine site is not suitable for sage grouse use and will not be suitable for many decades. The proposed mining activities will enlarge the unsuitable area from about 5 acres to 20 acres during the operating life of the mine and will extend the duration of recovery.

No plant species in the immediate project area are listed as threatened or endangered under the Endangered Species Act. Two species listed by the state of Oregon as Endangered, Owyhee clover (*Trifolium owyheense*) and smooth blazing star (*Mentzelia mollis*), are found adjacent to the proposed area of mining operations. The clover occupies somewhat less than an acre in total in an area of approximately 5 acres along the eastern edge of the north-south ephemeral drainage in the eastern portion of the claim block. The sites supporting the clover are not continuous, but occur as small pockets.

The smooth blazing star occupies a very small (25' X 50') site on a west-facing, brownish clay ash outcrop distinctive of the Succor Creek formation. Because of the lack of rainfall in the spring of the year when the site was discovered in 2001, very few plants were found. This site occurs at the southern edge of the NE¼NE¼ of Section 1 in the township and range as above, outside the area of proposed operations.

Weeds: No County or State "A" listed weeds are known to exist within the site. However, leafy spurge (*Euphorbia esula*), a County "A" and State "B" listed species was found within 1/8 mi. of the southwestern border of the mine site. Leafy spurge, an extremely long-rooted, long-lived, invasive perennial, is also classified as a "T" (Targeted) species for the state of Oregon, due to its economic threat. Scotch thistle (*Onopordum acanthum*), a County and State "B" listed biennial weed, can be found in the immediate area as well as County "C" listed weeds and State "B" listed weeds, Canada thistle (*Cirsium arvense*) and whitetop (*Cardaria draba*). Another State "B" designated weed present is bull thistle (*Cirsium vulgare*). Other non-native species include common mullein (*Verbascum thapsus*) and cheatgrass (*Bromus tectorum*).

Livestock Grazing: The project area is located in the 932 acre Sheaville Pasture (94% public domain) that is grazed by cattle in rotation with fourteen other pastures within Spring Mountain Allotment. The average stocking rate for the allotment is 6.7 acres per Animal Unit Month (AUM). There are 131 AUM's of public land forage available to cattle within the pasture. The established grazing schedule is an alternate year deferred rotation system. The period of use is April 30 to October 31.

The pasture is native range in middle ecological condition and an upward to static trend when last evaluated in 1994. The management objectives established in the Southern Malheur Rangeland Program Summary for Sheaville Pasture and carried forward in terms and conditions of grazing permits is to improve the ecological condition of upland vegetation communities.

A range fence for this pasture runs parallel to US Highway 95 and crosses the proposed access road about 30 feet from the Highway. Currently a wire gate is maintained at the access road.

Lands & Realty: Two previously granted rights-of-way cross the access road near the junction with US Highway 95. A 69 kV non-exclusive electric power line right-of-way (ORE 01149),

granted in 1958, crosses the access road and continues northeast outside the boundary of the proposed four phase mining area. The right-of-way is 120 feet in width. It expires in 2022. A buried fiber optic telephone line right-of-way (OR-47104) crosses underneath the access road to US Highway 95 and continues north paralleling the highway right-of-way. The right-of-way which was granted in 1991, and expires in 2021, is 15 feet wide.

***Recreation*:** Recreation use is limited to occasional seasonal dispersed activities associated with activities such as hunting, hiking, rockhounding, and perhaps general driving for pleasure. There is no evidence of dispersed camping occurring within the proposed mining claim area. Incidental traffic from U.S. Highway 95 by high clearance vehicles can occur on the claimants access road. An existing two-track road branches from this access road and continues southwest. This alternate route is not considered reasonable to drive on during water-saturated road surface conditions due to soil properties. However, the route eventually junctions with the "Old Highway" road, which is an extension of but not a part of Malheur County Road 1121, located east of the proposed mining operations. The "Old Highway" road eventually enters private land, with no known public right-of-way across it. Eventually it connects with the old Silver City Road.

***Visual Resources*:** The mining claim is located within a visual resource management (VRM) class III area. The management objective for VRM class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominate natural features of the characteristic landscape. As observed from U.S. Highway 95, the key observation point associated with this proposal, the mining activities may be seen by both the north-bound and south-bound moving traffic for an approximate 15 second period of time. For south-bound traffic, most of the mining claim area is topographically screened from the highway. Northbound traffic approaches the claim area on a steep, curving downgrade, which provides a good view of the top of the knoll where operations are proposed, but even so, the view is short at highway speed.

Cultural Resources: Pre-European contact Native American peoples were extremely well adapted to their environment. The subsistence economy was strongly oriented toward gathering and collecting because plant foods were more abundant and dependable than fowl, fish or mammals. Mammals provided skins, furs, tools and many other by-products of aesthetic and practical value. Insects were often eaten, beetles, grasshoppers, locusts, crickets, ants and caterpillars were consumed, as well as most eggs and larva. Historic documents indicate that several hundred plants were used by the Indians of the Great Basin for medicinal purposes, fiber sources and food. The Native people of the Great Basin, who practiced the ancestral lifeways into the 19th century were heirs to an extremely ancient cultural tradition with a technology both effective and efficient, with many multi-functional, light-weight and expendable tools.

Exploration into this area during the Historic period began with the expeditions of John Jacob Astor, after he heard the stories from the Lewis and Clark Expedition of 1804-1806. The first written observations of southeastern Oregon can be found in journals kept by men involved in the expansion of fur trapping territory. Trapping occurred along the major and minor tributaries in the area: Owyhee, Snake, Malheur, North Fork Malheur and South Fork Malheur Rivers. The era of the fur trade provided the basis for American families to travel west. Settlement into this area occurred in the late 1800s and early 1900s, spreading outward from along the perennial waterways like the Owyhee River and Succor Creek. Cattle ranching and sheep herding and some fruit growing were farming activities practiced in the area until the mid-twentieth century.

Paleontological Resources: Vertebrate fauna fossils on public lands are managed under the following authorities:

Federal Land Policy and Management Act (1976)
National Environmental Policy Act (1969)
43 CFR 3802 and 3809
43 CFR 8365.1-5

These laws and regulations address protection of scientifically significant paleontological resources and provide for collection of vertebrate fossils for scientific study.

In the vicinity of the proposed mining operations, lower tuffaceous sedimentary rocks which date to the Middle Miocene are overlain by basalt and interbedded with leaf bearing tuff, yellowish white or grey in color. Lenses of coal are present interbedded with deposits of Sucker Creek Ash. Tuffs and sedimentary deposits date to between 15.5 and 10.6 million years ago. The Coal Mine Basin area, to the north, contains unique geologic features. Fossils of roots, leaves, fish, Oreodonts and horses have been found within the tuffs and sedimentary deposits. Fossil localities are common throughout the area surrounding the area of proposed mining operations, along Succor Creek and in Coal Mine Basin.

***Native American Concerns*:** At present, there are no known Native American concerns in this area.

Other Mandatory Elements: The following mandatory elements are either not present or would not be affected by the proposed action:

Prime and Unique Farmlands
Fisheries
Wetlands/Flood plains
Cultural Resources
Wilderness/Wilderness Study Areas

Areas of Critical Environmental Concern
Wild & Scenic Rivers
Hazardous/Solid Wastes
Environmental Justice

IV. ENVIRONMENTAL CONSEQUENCES AND PROPOSED MITIGATION

A. PROPOSED ACTION

Air Quality: During seasonal mining activities, the main source of emissions would be from diesel and gasoline driven vehicles. Mining and loading operations are expected to create only negligible amounts of dust. The mined material would be exposed to the air for relatively short periods of time, and the haul distance to U.S. Highway 95 is very short. The anticipated road travel activity for hauling would be only slightly more than what it is presently. During very dry period, water dampening of the access road would minimize dust dispersion into the air.

Water Resources/Riparian: With mitigation measures, stipulations, and actions stated in the Plan of Operations, impacts to water resources would be negligible over existing conditions.

Topography: At site-specific locations, depending on the quantity and quality of zeolites present, varying degrees of topographic alteration would occur during mining activities. Following mineral extraction, reclamation actions, including but not limited to re-contouring, would leave the disturbed areas in relative harmony with surrounding natural topographic features, and would minimize otherwise potential unnatural sharp topographic contrasting.

Soils: Soil structure would change with disturbance. Stipulations attached to this EA and actions stated in the Plan of Operations would lessen impacts to soil and decrease erosion potential.

Geology/Minerals: Removal of marketable zeolite from the mining claim would result in depletion of a non-renewable resource in a very site-specific location. However, the impact would be considered minor relative to the likely extent of zeolite within the larger region which contains zeolite properties.

Vegetation: The initial mining operation is proposed to begin in the area previously disturbed, but partly revegetated. Operations would extend south impacting the sagebrush and bitterbrush communities which are recolonizing this area and the intact sagebrush/bitterbrush and and Wyoming big sage communities found to the south. Disturbance is expected to completely remove existing vegetation in the area of proposed

operations. The road to the site also would be widened and improved with a resulting localized impact to the plants adjacent to the road. Vegetation rehabilitation using native species suitable to the site, including bitterbrush, should restore much of the original vegetation potential over the next 50 years.

***Wildlife*:** The human and mechanical activity and the periodic use of explosives typically practiced at mining operations usually results in reduced wildlife use at and adjacent to the mined areas. Mine operations would be conducted from April to November, over a period of 10 to 20 years, disturbing up to 3.5 acres of ground. During the wet season (November to April) no operations are planned.

For activity that would occur from April to November, in four phases of mining disturbing up to 3.5 acres in less than one acre increments, with concurrent reclamation, it is assumed that 1) although rehabilitation will occur immediately, it will require 10 years for rehabilitated habitat to support a minimal wildlife population and 20 - 40 years before conditions support the original numbers and diversity, 2) new mining activity will occur adjacent to old mining activity and ongoing rehabilitation, and 3) no accidental range fires or spills of hazardous materials will occur.

Minor impacts will occur to the resident and migratory deer herd in this area. Deer will leave the vicinity of active mining, milling and transportation of zeolite during the day but will return to portions of the area where native and exotic plants occur at night to feed or travel through. During extended periods when no mining activity occurs, big game use will be similar to what is occurring with no mining.

Small mammals and songbirds typically establish territories in suitable habitat, which they occupy exclusively. The proposed mining activity would result in 3 to 4 acres of highly disturbed or barren, rocky ground and 1 to 4 acres in various stages of rehabilitation. Human activities such as transportation of materials and blasting etc will affect additional individuals in undisturbed habitat adjacent to the active mining operation. Activities that make an area unsuitable at a critical period of time in a species life history often eliminate that species for an entire year or prevent it from successfully reproducing during that year. Conversely, disturbances that occur when a species isn't present will affect that species only to the extent that habitat is affected.
All small mammal and reptile species suspected in the project area are common throughout the sagebrush steppe community. Little impact is expected to these species at the population level and only individual in and adjacent to the proposed project area will be affected during mining and habitat recovery period, which is expected to last 10-50 years.

Several songbird species, including Brewers sparrows, sage sparrows and sage thrashers, are "Migratory Nongame Birds of Management Concern in the United States", and

Executive Order 13186 directs federal agencies to..." avoid or minimize, to the extent practicable, adverse impacts on migratory bird resources" and to "restore and enhance the habitat of migratory birds, as practicable." Furthermore, the EO directs federal agencies to evaluate the effects of actions and agency plans on migratory birds in NEPA documents. Since there is no known research on the population density of these species of concern in the proposed mining area an average of 3 acres per territory is assumed (Paige and Ritter, 1999). The proposed mining and rehabilitation plan would disturb approximately 3.5 acres of ground. At the observed rate of habitat recovery approximately one breeding pair of each species would be displaced during the life of the project. The actual number of affected songbirds may vary with the rate of mining and the success of rehabilitation, especially of the shrub and forb community. The proposed replanting of native species, especially shrubs, will reduce the number of breeding birds affected during the life of mining activities and the rehabilitation phase.

***Threatened/Endangered Species*:** No species of wildlife or fishes either proposed for listing or listed under the Endangered Species Act would be affected by the proposed action. The Endangered Species Act contains provisions that will affect the mining activity should affected species become listed or a listed species be discovered within the area affected by the proposed project.

The proposed mining activities including human presence and vegetation impacting practices likely would affect habitat that could be used by the Bureau sensitive loggerhead shrike and northern sage grouse. However, due to the low density of nesting shrikes found in dense brushlands currently present and the current disturbance to sage grouse caused by Highway 95, little effect to the current or potential habitat and populations of these two species is expected.

The proposed phases of the mining operation, which would begin in the area of the original disturbance, would not impact the smooth blazing star, but may impact a small portion of the Owyhee clover area. Sites of both species occur well out of the Phase I, II, and III proposed operations. The proposed Phase IV mining operations may impact the southern tip of the Owyhee clover site, resulting in complete removal of the plants and their associated community in that area.

Weeds: Proposed disturbance to the area may create new niches for invasive species. Scotch thistle, bull thistle and cheatgrass readily invade disturbed areas. Concurrent reclamation practices would assist to minimize possible introduction of new weed species. Pressure washing of mining equipment prior to transporting them to the mining site would preclude introduction of non-native vegetation onto the site.

Livestock Grazing: Removal of livestock grazing from the 3.5 acre area of proposed mining operations would result in a loss less than one AUM per year. No impact to livestock watering is anticipated as no water sources are located within the area of proposed mining. No significant change in livestock use patterns is anticipated. Successful revegetation of those portions of the mining claim with surface disturbance at the closure of mining activity would result in restoration of AUM.

Lands & Realty: Mining activities have the potential to interfere with the use of the power line right-of-way (OR0011149), and the fiber optic right-of-way where they cross the access road from Highway 95.

Recreation: Mining activities would have minimal impacts to dispersed hunting opportunities. While seasonal mining activities would partially coincide with the beginning of certain fall big game seasons, thus affect the presence of those game species within the vicinity of the project area during that time, there would be nominal impact to game or hunters. However, hunter and recreational foot traffic from U.S. Highway 95 would be precluded from April to November during periods of operation.

***Visual Resources*:** The proposed mining activities, associated reclamation actions, and placement of temporary support facilities would meet BLM's VRM class III objectives. Topographic screening from southbound traffic substantially precludes observation of mining associated activities from the key observation point north of the project area at U.S. Highway 95, with the short observable duration of approximately 15 seconds considered an insignificant visual impact to a south-bound highway traveler. For northbound traffic, there is substantially less screening, but the observable duration is also approximately 15 seconds.

Cultural Resources: On May 25, 2001 a Class III cultural resources survey for prehistoric and historic sites was conducted on the 80 acres proposed for this project. No prehistoric or historic sites were located during the survey of this project area.

Paleontological Resources: On May 25, 2001 a survey for fossil flora and fauna was conducted on the project site and vicinity. The lands east of the proposed mining area contain a layer of leaf bearing tuff that is white or gray in color. During the survey, one fossil leaf locality was recorded in the tuff layer. The leaf appears to be a willow in light olive grey tuffaceous sediments. Also a very thin lense of red breccia was located which contains leaf and reed fossils. Both fossil locales are located outside of the proposed area of mining operations. Leaf fossils buried within the layered tuff ash on the project site could be damaged or lost during mineral extraction activities. With no known presence of vertebrate paleontological resources, there would be no affect to this protected resource.

***Native American Concerns*:** At present, there are no known Native American concerns in this area.

B. NO ACTION ALTERNATIVE

Air Quality: There would be no impact to air quality under this alternative.

Water Resources: There would be no impact to water resources under this alternative.

Topography: There would be not new impact to the area's topography.

Soils: There would be no new impact.

Geology/Minerals: There would be no new impact.

Vegetation: The absence of mining activities would cause no impacts vegetation.

Wildlife: The area currently affected by past mining activity is recovering from the removal of vegetation. The presence of Highway 95 and the topography would continue to restrict the value of the area for sage grouse and mule deer. The small number of resident and migratory small mammals, reptiles and songbirds within the current disturbed area would increase as shrubs, forbs and grasses recover from past disturbances.

Threatened & Endangered Species: There would be no effect on any listed, proposed or candidate species, nor on BLM or State listed sensitive species.

Weeds: Under this alternative, because of no new soil disturbance, the site would be less susceptible to weed invasion.

Livestock Grazing: No new impacts to public land livestock grazing authorizations, use patterns, or water availability would result with the continuation of present resource use authorizations and no mineral development of Victor Industries mining claim.

Lands & Realty: No impact. There would be no change in the existing power line right-of-way.

Topography: The existing surface disturbed locations within the mining claim would remain unchanged.

Soils: No impact.

Recreation: There would be no impact to dispersed recreational activities which may occur in the area.

Visual Resources: There would be no additional visual impacts within the area.

Cultural Resources: There would be no affect to prehistoric or historic properties under this alternative.

***Paleontological Resources*:** There would be no affect to paleontological resources in the area.

***Native American Concerns*:** At present, there are no known Native American concerns in this area.

C. PROPOSED MITIGATION MEASURES AND STIPULATIONS

To prevent unnecessary and undue degradation of federal lands, to protect other resources and other values and to provide for other public uses which may be affected by implementation of the proposed action, the following mitigation measures and stipulations would be applied:

1. The boundaries of the four phase area of operations, including its four corners, must be clearly marked on the ground by stakes or lathe and maintained at all times.

2. If archaeological or fossil material is discovered during operations, ground disturbing activities in that area must cease, the material must be left in place, and the Authorized Officer notified immediately. Such material shall remain the property of the United States.

3. All existing developments, including roads, fences, rights-of-way, public land survey monuments, etc., will be maintained in serviceable condition at all times. Damaged or destroyed developments will be replaced, restored or appropriately compensated for as determined by the Authorized Officer.

4. The current wire gate at the proposed mine access road shall be replaced with a properly installed cattle guard.

5. Prior to commencing road improvement and cattle guard installation Victor Industries must contact Oregon Idaho Utilities of Caldwell, Idaho to obtain directions for avoiding or working around the existing fiber optic line that cross the proposed mine access road near US Highway 95.

6. Surface soil material from all disturbed areas (access roads, pits or trenches, facilities sites) will be stockpiled in an area designated by the authorized officer for later reclamation.

7. Locate soil and overburden stockpiles away from surface water and drainages to minimize off-site drainage effects.

8. Establish vegetation cover on soil stockpiles that are to be in place longer than 1 year, using the seed mix listed in Item 13.

9. To ensure new noxious weeds are not introduced into the project area (and/or spread outside of the project area, all ground disturbing equipment and support vehicles (including trailers) must be thoroughly washed before coming onto public lands.

10. Operations will be suspended during periods of wet or muddy road or soil conditions. If an access route becomes very dry and powdery, the road must be repaired or operations suspended. All roads must be maintained in a similar, or better condition, to that which existed prior to commencement of operations.

11. Dust abatement/suppression measures will be taken during periods of extreme dust generation and as otherwise determined by the authorized officer. Surfactants used for dust abatement must be of such a nature as not to prevent or interfere with vegetation regrowth and must not adversely affect water quality. Their use must be approved by the authorized officer.

12. Upon completion of surface disturbing activities, disturbed areas will be reclaimed, except for the evidence of mineralization (if approved by the authorized officer), by sloping and contouring to conform as much as possible to the natural terrain, replacing surface soil material over the restored area, and reseeding.

13. All disturbed areas will be seeded with the following mixture of pure live seed, certified as weed-free. Apply seed in the fall, between October 15 and November 15.

SEED MIXTURE	**BROADCAST RATE**

"Secar" bluebunch wheatgrass	8 lbs./acre
bottlebrush squirreltail	1 lb./acre
Wyoming big sagebrush	0.1 lb./acre
"Topar" pubescent wheatgrass	4 lbs./acre
"Apar" lewis flax	0.5 lb./acre
western yarrow	0.5 lb./acre

14. If mining disturbance in the Phase IV mine area would disturb any Owyhee clover, the plants would be salvaged and transplanted to suitable habitat out of harms way in the immediate vicinity. In addition, seeds would be collected for subsequent reintroduction as part of the reclamation activities.

15. Temporary silt fences, straw bales, or mulching to trap sediment from descending down the three identified intermittent channels will be constructed and maintained during the life of the project, until reclaimed areas are stabilized with vegetation. All materials used will be biodegradable; metal fence posts or wire is not acceptable.

16. Maintain hand tools for fighting fire at the work site and be prepared to suppress any wildfires resulting from your operations. Report any wildfires to the BLM Vale District Office at (541) 473-6270 immediately.

17. All garbage and refuse shall be stored in sealed containers to prevent wildlife access (game and migratory birds, deer, coyotes, etc), and will be removed from the site to a State approved sanitary landfill on a regular basis during the seasonal mining operations. No garbage or refuse is to be left on site during the annual non-use period (approximately March to November).

18. Safety signs will be placed appropriately at the boundaries of the project area to notify and warn public land users of dangers and/or restrictions of access.

19. Upon completion of mining activities, motorized vehicle use routes determined by the BLM as not needed for access purposes and/or to minimize environmental impacts will be reclaimed so as to blend with the surrounding landscape setting.

20. Motorized access to the mine site will be limited to the existing access road from Highway 95. No new motorized routes will be developed without prior BLM approval.

21. The operator and employees will not feed, impede, or harass cattle or wildlife that may wander onto the project area.

D. CUMULATIVE IMPACTS

Cumulative impacts are the combination of effects of past, present, and reasonably foreseeable future activities on the subject parcel and where they may add incrementally to the effects from activities on nearby areas.

No significant cumulative impacts have been identified.

V. RELATIONSHIP BETWEEN SHORT-TERM USE TO LONG-TERM PRODUCTIVITY

Although mining would be seasonal in nature, impacts to livestock grazing and wildlife habitat would continue year-round for the life of the project due to the removal of vegetation. However, impacts would be localized at the mining excavation site, the access road, and at the processing building site if it were constructed. The area of impact would not extend beyond approximately a few hundred feet from the area of activity, and would last until vegetation recovered.

VI. COMMITMENT OF RESOURCES

The commitment of resources would extend for the life of the project. Reclamation, including surface reshaping and reseeding would allow the disturbed areas to approximate the surrounding landscape. Zeolite removal would represent a nonrenewable commitment of a natural resource.

VII. CONSULTATION AND COORDINATION

A. INDIVIDUALS/AGENCIES

Richard D. Leary, Ron Pellett, Penny Sperry - Victor Industries, Inc.
Amy Frazier - Van Hoover, Inc.
David Patton - Oregon Department of Transportation

B. PARTICIPATING BLM STAFF

Name	Position
Bob Alward	Recreation Planner
Al Bammann	Wildlife Biologist
Jean Findley	Botanist
Jon Freeman	Realty Specialist
Bill Holsheimer	Geologist (retired)
Rebecca Lange	Geologist/temporary detail
Diane Pritchard	Archaeologist
Shaney Rockefeller	Soils Scientist/Hydrologist
Lynne Silva	Weeds Specialist
Cynthia Tait	Fisheries Biologist
Steve Christensen	Rangeland Specialist
Ron Rembowski	Rangeland Specialist
Tom Hilken	Rangeland Specialist

C. PUBLIC SCOPING

A total of 36 individuals, organizations and government agencies were sent notices that an Environmental Assessment was being prepared for the proposed action. A list is available for public review at the Vale District Office.

D. PUBLIC INTEREST

A total of one party responded to the public scoping notice:

Committee for Idaho's High Desert (the Committee) - Requested that the proposed action be assessed in an Environmental Impact Statement. Concerns expressed by the committee include the presence of special status plant and animal (sage grouse) species, and impacts of roads, weeds and new surface scaring associated with the proposal.

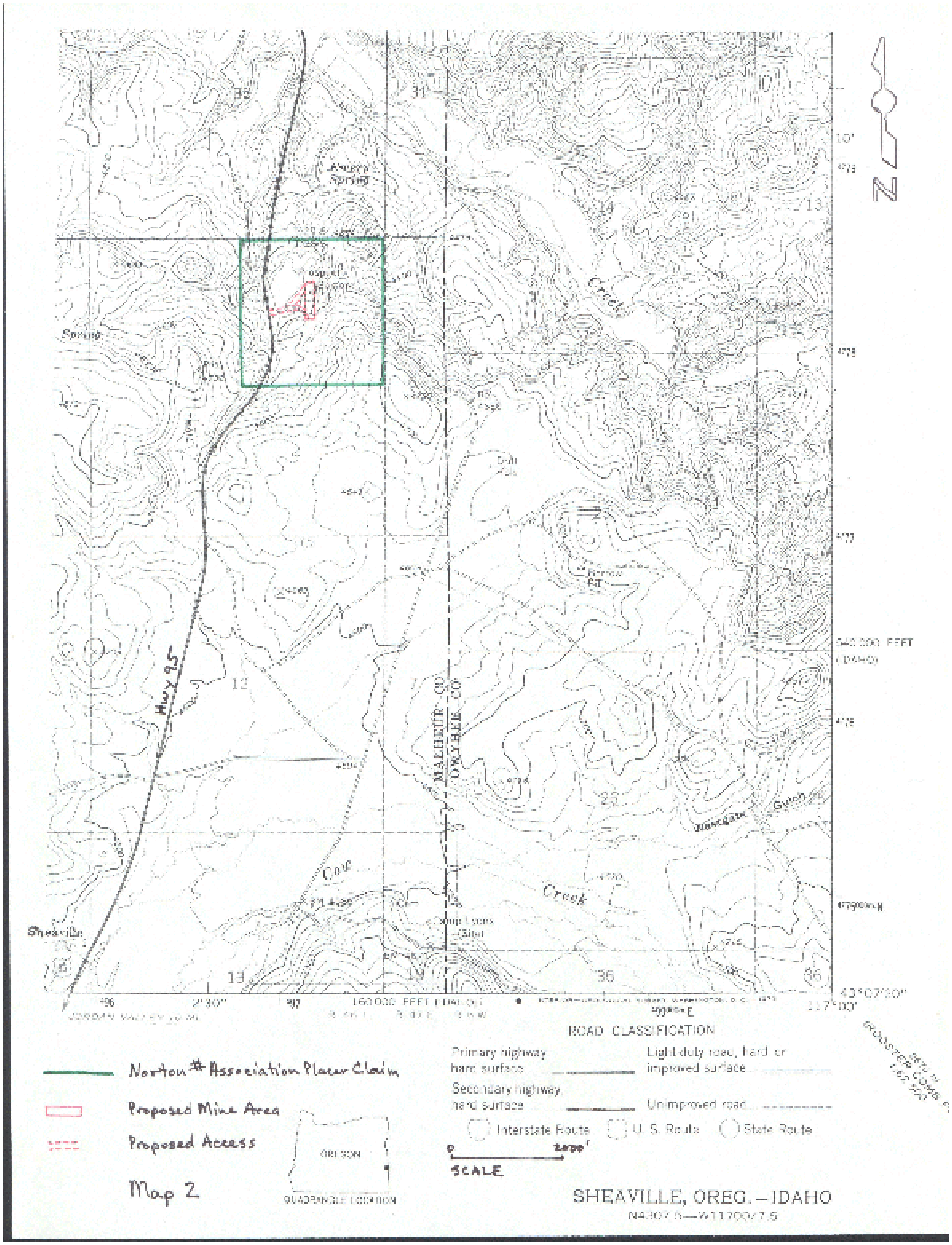
3809
OR 56953
EA # OR-030-002-001

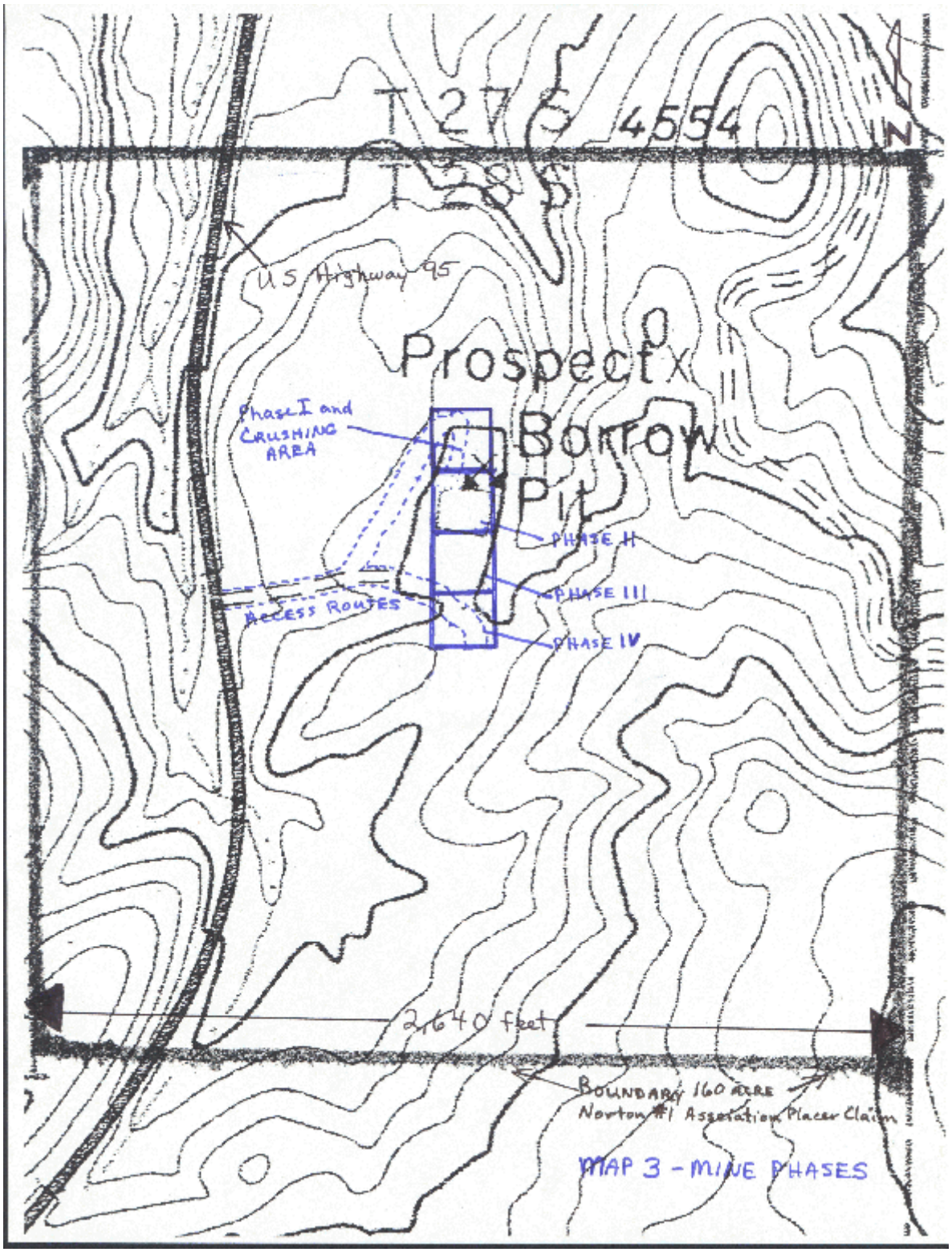
FINDING OF NO SIGNIFICANT IMPACT

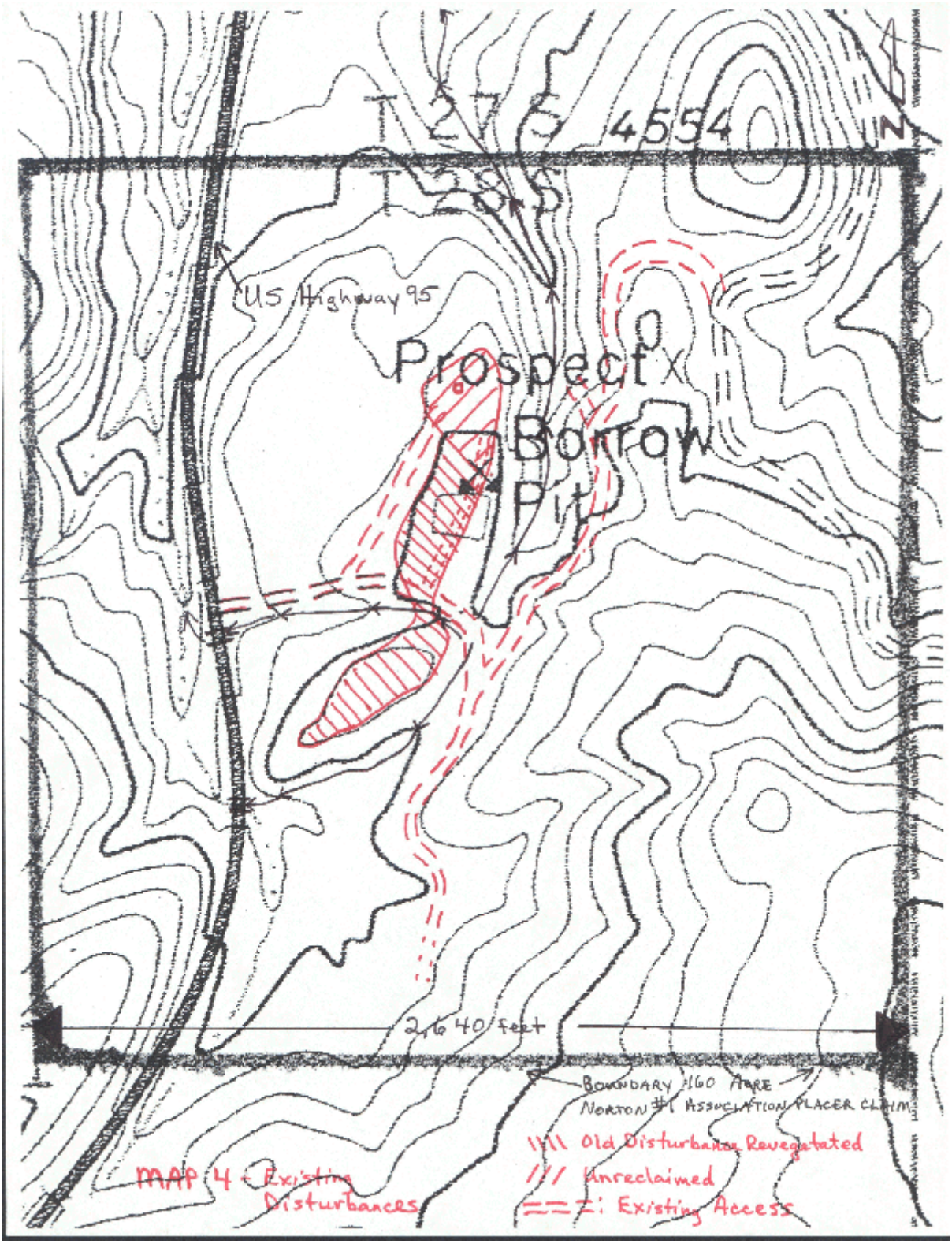
I have reviewed this environmental assessment for Victor Industries, Inc., including the explanation and resolution of any potentially significant impacts. I have determined that the proposed action with the mitigation measures described in the EA will not have any significant impacts on the human environment and that an EIS is not required. I have determined that the proposed action is in conformance with the approved land use plan.

Authorized Official: __s/Tom Hilken_____Date:__March 26, 2002_____
Acting Field Manager, Malheur Resource Area


Map 1 - Project Vicinity
BLM Vale District, Oregon
I-84
I-84
Vale
Proposed Mine
Hwy 95
Sheaville
Jordan Valley
McDermitt
30 0 30 60 Miles


Hwy 95
Sheaville
Spring
Creek
Cow
Creek
Norton # Association Placer Claim
Proposed Mine Area
Proposed Access
Map 2
OREGON
QUADRANGLE LOCATION
ROAD CLASSIFICATION
Primary highway, hard surface
Light-duty road, hard or improved surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U. S. Route
State Route
0
2000'
SCALE
SHEAVILLE, OREG. – IDAHO
MALHEUR CO
OWYHEE CO
43°07'30"
117°00'


T 27 S
T 28 S
4554
N
U S Highway 95
Prospect
Borrow
Pit
Phase I and
CRUSHING
AREA
PHASE II
PHASE III
PHASE IV
ACCESS ROUTES
2640 feet
BOUNDARY 160 ACRE
Norton #1 Assertation Placer Claim
MAP 3 - MINE PHASES


T27S
4554
T26S
US Highway 95
Prospect
Borrow
Pit
2640 feet
BOUNDARY #160 ACRE
NORTON #1 ASSOCIATION PLACER CLAIM
Old Disturbance Revegetated
Unreclaimed
Existing Access
MAP 4 - Existing
Disturbances

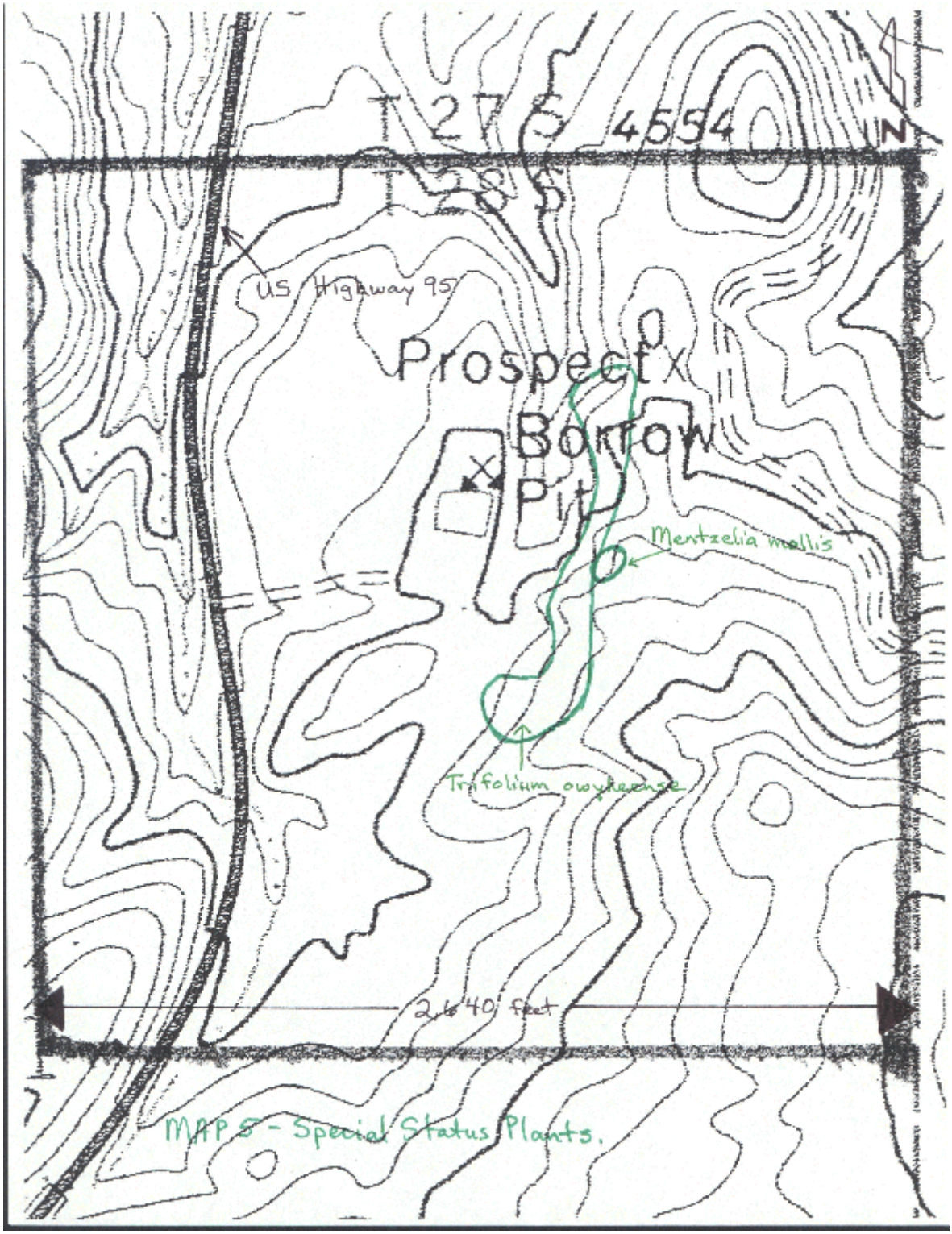
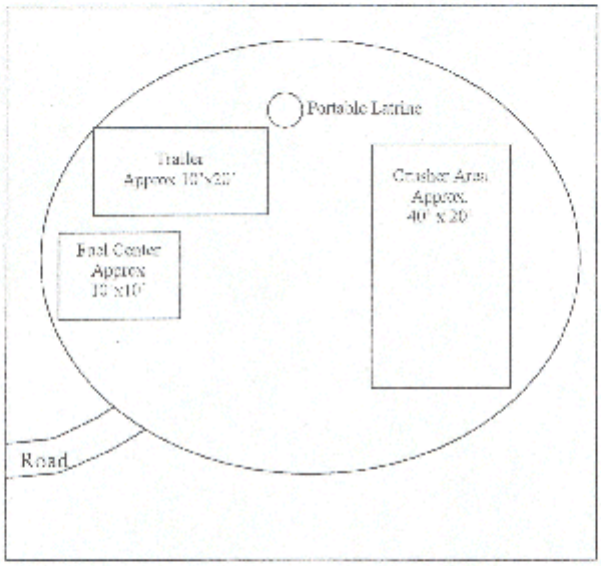

T 27 S
T 28 S
45 54 0
N
US Highway 95
Prospect
Borrow
Pit
Mentzelia mollis
Trifolium owyheense
2640 feet
MAP 8 - Special Status Plants.

FIGURE 1 – VICTOR INDUSTRIES
CRUSHING AREA



*Not to scale